



US 20140341187A1

(19) **United States**(12) **Patent Application Publication****Lei et al.**(10) **Pub. No.: US 2014/0341187 A1**(43) **Pub. Date: Nov. 20, 2014**(54) **METHOD AND APPARATUS FOR TRAFFIC OFFLOADING**(75) Inventors: **Yixue Lei**, Beijing (CN); **Kodo Shu**, Beijing (CN)(73) Assignee: **Nokia Corporation**, Espoo (FI)(21) Appl. No.: **14/365,596**(22) PCT Filed: **Dec. 23, 2011**(86) PCT No.: **PCT/CN2011/084528**

§ 371 (c)(1),

(2), (4) Date: **Jun. 13, 2014****Publication Classification**(51) **Int. Cl.****H04W 36/22** (2006.01)**H04W 76/02** (2006.01)(52) **U.S. Cl.**CPC ..... **H04W 36/22** (2013.01); **H04W 76/022** (2013.01); **H04W 88/08** (2013.01)USPC ..... **370/331**

(57)

**ABSTRACT**

A method, apparatus and computer program product are provided to support traffic offloading in a manner that relies upon a wireless access point having a co-located local gateway (L-GW), but that does not require each access point to have a co-located L-GW. In the context of a method, the traffic offloading capabilities of at least one other access point is initially determined. The method may also cause a tunnel to be established with another access point with a co-located L-GW having traffic offloading capabilities. Further, the method cause communications with a network to be conducted via the tunnel established with the another access point so as to utilize the traffic offloading capabilities of the another access point.

